REPORT RESUMES

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INTERRELATIONSHIP OF HOME ENVIRONMENT AND EMPLOYMENT.

BY- SCRUGGS, MARGUERITE SOUDER, MARY FERN
IOWA STATE UNIV. OF SCIENCE AND TECHNOLOGY, AMES

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IN ORDER TO IDENTIFY CHARACTERISTICS OF HOME ENVIRONMENT WHICH RELATED TO THE WORKER'S EMPLOYMENT RECORD, TO TEST METHODS OF OBTAINING INFORMATION, AND TO DEVELOP RATIONALE FOR LATER TESTING, DATA WERE COLLECTED FROM COMPANY RECORDS, A QUESTIONNAIRE SURVEY OF 40 EMPLOYEES IN TWO GROUPS, AND INTERVIEWS OF EMPLOYEES' WIVES. ALL PARTICIPANTS WHO WERE SKILLED, SEMISKILLED, AND UNSKILLED WORKERS HAD SIX COMMON CHARACTERISTICS--20-40 YEARS OLD, MARRIED WITH WIFE WORKING OUTSIDE THE HOME LESS THAN 20 HOURS PER WEEK, ETC. WAGE GROUP AT THE TIME OF STUDY DIFFERENTIATED THESE INTO TWO GROUPS--GROUP 1 CONSISTING OF MEN EMPLOYED IN THE THREE LOWEST WAGE GROUPS AND GROUP 2, MEN EMPLOYED IN THE FIVE HIGHEST WAGE GROUPS. DATA WERE ANALYZED BY DEVELOPING AND ANALYZING CASE STUDIES, COMPARING GROUPS, AND EXAMINING INTERCORRELATES OF 116 VARIABLES WITHIN EACH GROUP AND FOR THE TOTAL OF 40 FAMILIES. ABSENTEEISM WAS SLIGHTLY HIGHER IN GROUP 2. BOTH GROUPS AVERAGED ABOUT THE SAME NUMBER OF PART-TIME JOBS IN ADDITION TO COMPANY JOBS. GROUP 2 HAD MORE SENIORITY, MORE UPWARD WAGE MOBILITY, AND MADE MORE SUGGESTIONS TO THE COMPANY. GROUP 2 FAMILIES WERE HIGHER IN SOCIAL PARTICIPATION AND MORE UPWARDLY MOBILE SOCIALLY, MENTIONED MORE HOME CHARACTERISTICS THEY BELIEVED WOULD INFLUENCE MEN ON THE JOB, AND EXHIBITED MORE HARMONY IN THE FAMILY, BETTER RESOURCE MANAGEMENT, AND MORE DEMOCRATIC DECISION MAKING. ABSENTEEISM CORRELATED POSITIVELY WITH THE NUMBER OF CHILDREN, NUMBER OF MOVES BY FAMILY IN THE PAST 5 YEARS, AND NUMBER OF HOME-INFLUENCING FACTORS IDENTIFIED BY THE WIFE. IT WAS RECOMMENDED THAT RELATIONSHIPS IDENTIFIED IN THIS STUDY BE INVESTIGATED FURTHER IN OTHER KINDS OF JOBS FOR WHICH VOCATIONAL AND TECHNICAL EDUCATION PROVIDES TRAINING. SAMPLING AND DATA COLLECTION TECHNIQUES PROVED TO BE EFFICIENT. THIS REPORT APPEARS IN "APPENDIX OF FINAL RESEARCH REPORTS FOR PROJECT IN RESEARCH AND DEVELOPMENT IN VOCATIONAL AND TECHNICAL EDUCATION, NON-METROPOLITAN AREAS," WHICH SUPPLEMENTS VT 001 546. (JM)

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Marguerite Scruggs
Mary Fern Souder

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Iowa State University of Science and Technology

Ames, Iowa
50010

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I. INTRODUCTION

A. The Problem and Background

The belief that there is a positive relationship between characteristics of the home environment and achievements of the man in the work world has been supported by labor, industry, business, and education; however, there is little tangible evidence establishing the validity of this relationship. Although there is much research on either home environment or achievement on the job, there is little research studying the relationships between the two.

Increased knowledge of these relationships for which vocational education provides training in non-metropolitan areas of the United States is needed. Such knowledge could serve as one basis for determining the purposes that need achieving and the people who need serving by vocational education.

B. Review of Related Literature

1. Importance of work in life. Society's ordering is a matter of man's relation to the work world. Hughes (11, p.42-43) maintains that a man's work is one of the characteristics by which he is judged and one of the more significant characteristics by which he judges himself. It is an important part of his social identity and a determinant of his fate in life. If work is one of the most important elements for self and societal evaluation, it behooves educators to help workers attain a level of employment that allows for greatest self-achievement.

2. Relationships between employment and other aspects of life. As early as 1938 Hall and Locke (7, p. 90-91) were investigating possible relationships between employment aspects and life outside the factory. In a study conducted in a British factory they concluded that very few workers could divide their lives into two water-tight compartments, life inside and life outside of the factory. An unsatisfactory life outside of the workroom reduced efficienty within it and might even render a worker completely unfit for industrial life. Men and women who expressed worry about debts or illness of a near relative were unable to give their undivided attention to their work. Hall and Locke further reported that workers who were kept in severe subjection at home often resented factory discipline and tried to assert their independence by behaving rudely or by refusing to cooperate with others. On the other hand, young workers bearing unduly heavy domestic burdens were apt to regard the workroom as

a providential opportunity for making arrears of fun before they returned to their real life work at home.

Hartman (9, p. 160) studied the relationship between marital adjustment and job adjustment. In his pilot study of 71 attendants at a public hospital, he found significant relationships between marital adjustment and job adjustment for both men and women. In the second phase of the study, 75 additional subjects were interviewed and the relationship decreased in significance for the men but remained high for the women.

Kornhauser (13, p. 187) found that factory workers in small towns tended to have higher life satisfaction than similar workers in Detroit. He also found that family relationships were more unfavorable for semiskilled factory employees in Detroit than for comparable small town workers (13, p. 191).

Aberle and Naegele (1, p. 132) found that the occupational role of middle-class fathers influenced their attitude toward socialization of children. The fathers evaluated their children in terms of middle-class occupational expectations.

3. Research concerning families of industrial workers. The critical need for research dealing with working-class families was expressed by Sexton (19, p. 81) and Komarovsky (12, p. 5). The latter points out that there are basic differences between families of blue-collar workers and middle-class more highly educated professional persons. The study of 58 blue-collar marriages was similar to the present study in the design for collecting the data.

4. Occupational aspirations and environmental factors. Haller and Miller (8, p. 127) found occupational aspiration for boys related to psychological factors, including personality adjustment, emotional stability, lack of nervous tension, super ego strength, sophistication, and independent self-sufficiency. Dole (2, p. 90-91) also found boys' occupational aspirations were related to occupational level of the father. Dyer (3, p. 90) in a survey of family reactions to the father's job, concluded that the studies were consistent in showing that most blue-collar workers did not want their children to follow their line of work. This contrasted with the general trend of the sons to follow in their fathers' footsteps.

5. Employment and aspects of home economics. Research has been conducted relating employment and aspects of home economics including clothing, food and nutrition, management, and housing. For example, Form and Stone (4, p. 4) and Stone and Form (20,p.25)

studied certain clothing behaviors and employment criteria. They found that the white-collar worker was extremely concerned about the attention co-workers in his work environment gave to his occupational dress, but the manual worker was often unaware that others may judge him by his clothing. They also reported that the lower the income of the husband, the higher the reports of clothing deprivation of the wife. Rosencranz (18, p. 3) found that wives in higher-prestige occupations and income groups bought more dresses in "high prestige" specialty shops or "better" department stores than did wives of manual workers and low income groups. Also, significantly more wives in the manual worker group said that their purchases were based mainly on economic considerations. Sexton (19, p. 83) characterized blue-collar wives as receiving greatest satisfaction when buying clothing for their children, but white-collar wives found buying clothing for themselves more satisfying.

Haggard and Greenberg (6, p. 2) studied the relationship between nutrition and work productivity and found that productivity increased with improved diets. Gray (5, p. 7) found that productivity decreased when caloric intake was reduced.

Hill (10, p. 457) studied the relationship between consumership and the income and husband's occupation and found that the employment variables did not predict consumership. Patterson (17, p. 76-77) found that blue-collar workers accounted for up to 60 percent of the market potential for certain goods and that blue-collar families bought approximately 40 percent of all top-priced refrigerators, washing machines and sewing machines sold.

Improved housing did not produce heightened job aspirations in a study of Baltimore Negro slum residents conducted by Wilner, Walkley, Pinkerton and Faybark (22, p. 250). This was concluded on the basis of information gained through personal interviews and public-agency records of 1,000 families.

C. Objectives

The objectives were:

1. To identify some characteristics and possibly patterns of characteristics of the home environment of skilled, semiskilled and unskilled workers that appear related to the husband's employment record.

2. To test various methods of obtaining information.

3. To develop a rationale consistent with the findings and including hypotheses to be tested later in a more comprehensive study of relationships between employment and home environment.

II. METHOD

Because of the exploratory nature of this study and the limited experience of researchers in working with manufacturing companies and unions, the bases for choosing and analysis of the different procedures were an important part of the research.

A. Definition of Population and Sample

The population of ultimate concern in this study was skilled and semiskilled workers along with their families in fields for which vocational and technical education assume instruction responsibility. This exploratory study focused upon skilled, semiskilled or unskilled laborers of manufacturing companies. One reason for choosing manufacturing was that any relationships that might exist between home environment and job performance in this field seemed less obvious than would be true in other kinds of work for which vocational education provides training and in which the wife plays some more direct role in a man's job.

1. Selection of manufacturing company. After compiling a list of manufacturing companies in a selected midwestern nonmetropolitan area and consulting with experts in industrial psychology, sociology and engineering extension, the researchers tentatively selected a company. Conferences were held with officials of the company who conferred with local union officials. Arrangements were worked out for conducting the study using procedures satisfactory to the company, union and researchers.

The company chosen was a well-established manufacturing firm, which had maintained good labor-management relations over a period of years, manufactured metal products and employed sufficient workers to provide for the sample size desired. In this study, the existing wage groups were arbitrarily categorized into 11 groups ranging from unskilled to semiskilled to skilled trades.

2. Identification of sample of employees. Two sets of criteria were set up for specifying the characteristics of employees and their families to be included in the study. One set identified characteristics all participants were expected to have in

common; the other, characteristics that were to distinguish between the two groups. The common characteristics included:

1. Each man was married with his wife living at home and employed outside the home less than 20 hours per week.
2. Each family included one or more children under age 18 living at home.
3. Each man was initially employed by the company during 1951 through 1955 and had been continuously employed ever since.
4. Each man at the time of employment had either completed eighth grade, had completed some high school but had not been graduated or had been graduated from high school.
5. Each was 20 to 40 years old at the time of first employment.
6. Each was first employed by the company in one of the three lowest wage groups. Five exceptions were made to this in Group 2.

The criterion used for differentiating between the two groups was the wage group at the time of the study. Group 1 consisted of men employed in the first three wage groups and Group 2, of men employed in upper wage groups.

Records revealed 47 men who met the Group 1 criteria, and 31 met Group 2 criteria, with the five exceptions as to the beginning wage group as noted in the preceding paragraph. Data for all 78 employees were obtained from the company.

Judgment sampling was used in preference to random sampling in selecting 20 employees from each of the two groups. This was done to have the two groups comparable on educational level at time of first employment and as different as possible on the known employment variables. For each group five men had an eighth grade education, five had more than eighth grade but less than high school graduation and 10 had been graduated from high school.

The principal investigator selected and prepared a list of the names and addresses of the first 40 selected. Names were alphabetized by family name and no one except the principal investigator could identify any employee's criterion group. As interviewers reported ineligible families, the principal investigator selected alternates until 20 eligible families had been interviewed in each criterion group.

Of the eight employees found ineligible for Group 1, six were ineligible because the wife was employed more than half-time and two were separated or divorced from their wives. The five ineligible employees in Group 2 had wives who were working more than half-time outside of the home. Three homemakers refused to participate indicating they were too busy.

B. Selection of Employment Variables

Variables used in describing employment records were determined from data recorded by the company; validity of these data was judged by company representatives, researchers and consultants; data availability was determined by the policies of the company and the union; and consideration was also given to whether the kinds of data available from this company would also be available from companies included in later studies. Variables selected included wage group at the time of the study, years employed by the company, upward mobility in the company, income, absenteeism, accidents and suggestions to the company.

Two measures of upward mobility were used: the number of successful bids upward and the distance measured in terms of wage groups between the wage group at the time of the study and the wage group at the time of first employment.

Income measures included income received from the company, income earned from other sources and the total income. Because of an agreement between the union and the company, no information about an individual's wages could be revealed to the researchers by the company. Data on income were in the form of income categories based on quantity as shown on the form directed to the employee and left at the home for him to fill out.

The possibility of obtaining ratings of workers by supervisors was considered. After discussing this with company representatives, the researchers decided that there were no ratings available that would be reliable or valid for this study.

C. Selection of Home-Environment Variables

Because this research was designed to serve vocational education programs, it focused on those behaviors in the home that education can hope to change. Some additional types of data useful to educators in planning meaningful instruction were also included.

The scope of home economics also helped determine the choice home environment characteristics. The study was limited to those aspects of the home that the researchers and consultants believed would be related to employment achievement. Home environment aspects were categorized as: family composition and educational level, clothing, food and nutrition, management, social and psychological characteristics, housing, family relationships, child development and health.

D. Development of the Interview Schedule

Because the amount and type of data required from the homemaker were comprehensive and in some instances of a personal nature, an important aspect of data collection was building rapport with the respondent. A personal interview in which the researchers could have direct contact with the homemakers in their homes, be alert to information beyond that included in the interview schedule and assure the homemaker all responses were confidential was chosen.

Two professional home economists developed and revised the interview schedule with guidance from the principal investigator and consultants. Only the wives were interviewed because of time limitations and the complications of interviewing the husband independently at his home or on the job.

The completed instrument was submitted to the U. S. Office of Education for approval the latter part of February 1966. Final clearance for use of the instrument was granted March 24, 1966, and notification of this action was received by Iowa State University in a letter dated April 13. The instrument was also submitted to company and union officials for their constructive criticism and approval.

In its final form the interview schedule for the homemaker required approximately two hours to complete.

E. Questionnaire for Husband

At the end of the interview each homemaker was asked if she would solicit her husband's cooperation in obtaining his approximate income from the company and other sources and help him keep a record of dietary intake for a three-day period. These data were picked up by the interviewers on a return visit approximately four days after the interview.

F. Training of Interviewers

Seven pilot interviews were conducted in central Iowa in nonmetropolitan areas as the research instrument was being developed. After each day of interviewing, the research instrument and interviewing techniques were evaluated. Both interviewers attended a one-day clinic conducted by the department of home management to train interviewers for research planned by that department, and both had completed a college course in research methods.

G. Collecting the Data

Data for the study were collected from three sources: the cooperating company, the homemaker and the employee. Procedures used in collecting and recording the data are described in this section.

1. Obtaining data from the company. The company prepared a form for each employee containing data used in determining employee eligibility for this study and requested data related to the employment record. This information was presented to the researchers at a conference with company representatives on April 15, 1966.

2. Contacting the participants by mail. A letter signed by company and union officials was mailed to the selected employees and their wives on approximately May 1, 1966, before the beginning of the interviews of the homemakers on May 4. The letter stated that the company and the union were cooperating with the study, briefly described the interest of the researchers in obtaining information regarding homemaking practices of wives of working men for use in vocational education programs and encouraged cooperation with the interviewers who would be contacting the homemakers. When the interviews had been completed, the principal investigator wrote to each of the employees and their wives who had received the earlier letter from the company and union.

3. Conducting the interviews. The interviewing began on May 4, 1966, and was completed on June 14, 1966. An attempt was made to complete two interviews each day. Except for a few cases in which schedules of the homemaker made an appointment necessary, the interviewers made no appointments with the homemakers, but arrived at the home about 9:00 a.m. or 1:00 p.m. To express appreciation for her cooperation at the end of each interview, the interviewers gave the homemaker a recipe pamphlet (16) and a list of publications (14) available through the office of her local county home economist.

The two interviewers cooperated in the interviews. Each conducted parts of the interviews, served as a reliability check of judgments made about the home situation and assisted with care of children or other responsibilities that could help free the homemaker to participate in the interview.

4. Reporting the interviews. After each interview, the two interviewers made independent ratings of selected variables and independently recorded on a dictation machine supplementary information and impressions received. The information was transcribed and filed with other data for each case.

H. Analyzing the Data

As a means of identifying home environment characteristics that may be related to employment records of skilled, semiskilled and unskilled workers, three different methods of analysis were used. These included comparing the means of the two criterion groups, examining the intercorrelations among 116 variables within each of the criterion groups and for the total sample of 40 families, and developing an analysis of case studies.

Comparing the two criterion groups provided a source of clues to possible variables associated with the home environment that may be related to variables descriptive of employment records. The sampling method used was not designed for estimating employee characteristics because no estimate of sampling error was possible. The attempt was to maximize the differences between the two groups on employment variables to increase the visibility of any differences in home-environment variables.

Although only limited conclusions can be reached on the basis of intercorrelations among 116 variables for samples of 20 and 40, this method of analysis was used to identify related variables that could be combined into clusters to reduce the number of variables to be discussed and to provide clues to possible relationships among characteristics of home environment and employment behaviors. Variables were not combined into clusters unless they also appeared logically related. The Computation Center at Iowa State University computed the correlations. Coding, or scoring, is shown in the Appendix.

For the total sample and the two groups of 20, 116 variables were intercorrelated. At the one and five percent levels of significance, respectively, around 67 and 335 correlations were not significantly different from zero. The number of correlations significantly different from zero at the one and five percent levels, respectively, were 435 and 1007 for the total sample, 165 and 563 for Group 1, and 272 and 745 for Group 2. Throughout the report of results the correlations mentioned are those based on the total sample unless otherwise indicated. In selecting relationships to report, weight was given to the correlation's level of significance, the clustering of variables and the relationship's judged importance in the light of the study's purposes.

The case study method provided a means of intensively studying all the data about each family. At the time of this report the analysis of the case studies was incomplete.

Some of the variables have not been analyzed for this report. For example, so few employees had accidents that this variable was dropped. Also, the information regarding child development and some data regarding other home-employment variables were not included because of the time limitations of an 18-month study.

III. RESULTS

The results are reported in four sections. First, the sample of employees is compared with those in the population not included in the sample. The remaining three sections report the findings on employment variables, home-environment variables and the relationships between the two types of variables. In the latter three sections results from comparison of the means of the two groups, inspection of intercorrelations among variables and analysis of case studies were combined and reported together.

A. Comparison of Sample with Others in Population

The 40 employees included in the sample had similar characteristics to those not included in the sample in each of the respective criterion used in identifying eligible employees. Data are shown in Table 1. The largest difference between the sample and the non-sample within either group was for the mean age of employees in Group 1.

The non-sample employees in Table 1 represent those not selected for the sample as well as those who were selected and found ineligible for some reason other than an employment variable.

The data in Table 1 show that the researchers were not able to keep the two groups alike on beginning wage group, years employed by the company and age of the employee. There were fewer men in the company who had begun employment in one of the three lowest

Table 1. Means for criteria used in identifying criterion groups of employees by sampled and non-sampled groups

Variable	Group 1 Sample (n=20)	Group 1 Non-sample (n=27)	Group 2 Sample (n=20)	Group 2 Non-sample (n=11)
Planned to be common				
2. Beginning wage group	2.0	1.9	3.8	4.4
68. Years employed by company	11.6	11.8	14.0	14.0
12. Age in years	35.6	37.3	40.1	39.9
23. Educational level in school years	10.6	10.3	10.7	11.3
Planned to be differentiating				
3. Wage group at time of study	2.2	2.2	10.2	10.3

wage groups and were at the time of the study in one of the upper wage groups than men who had begun work in one of the first three wage groups and were employed in approximately the same wage group at the time of the study. As replacements were made in the sample for Group 2 it was necessary to include one man who began in wage group four and four men who began in wage group 11.

When it was necessary to include employees who were first employed by the company from 1951 to 1955 instead of any one year to have enough eligible employees in Group 2, it was assumed that a minimum of ten years would give any employee an opportunity to advance to one of the upper wage groups.

B. Family Descriptions

The composition of the 40 families who participated in the study along with the ages and educational levels of the parents is shown in Table 2. Comparison shows the parents in Group 2 were not only older when this study was carried out but were also older than those of Group 1 when their first children were born. Although the two groups of families included approximately the same number of children, the children in Group 2 tended to be slightly older than those in Group 1. Almost all children in the 40 families were still living at home.

Table 2. Group means for characteristics of families including age, education, and number of children

Variable		Group 1	Group 2
12.	Age of husband in years	35.55	40.10
13.	Age of wife in years	31.45	35.50
21.	Age of husband when first child was born	24.45	27.15
22.	Age of wife when first child was born	21.00	22.30
23.	Education of husband in school years	10.60	10.70
24.	Education of wife in school years	10.80	11.60
14.	Number of children of pre-school age	1.15	.65
15.	Number of children in elementary school	1.75	1.50
16.	Number of children in high school	.35	.95
18.	Number of children at home	3.25	3.10
20.	Total number of children	3.50	3.45

Although the educational level of the husbands in the two groups was comparable, the wives in Group 2 had a higher educational level than the wives of Group 1. One family in Group 1 had two children and one family in Group 2 had one child who had quit school before completing high school. All other children of school age were still in school.

C. Employment Variables

The employment variables included clusters of variables and individual variables and were named criterion group, seniority, mobility, absenteeism, suggestions to company, wages and other employment. The intercorrelations among the employment variables are shown in Figure 1. Criterion group is a cluster composed of variables one and three, the original criterion group and the wage group at the time of the study. Seniority is represented by the single variable 68, number of years employed by the company. Mobility is a combination of variables four, distance between beginning wage group and wage group at time of the study, and five, the number of successful bids upward. Variables eight, nine and 10, the number and hours of absences as well as absence due to illness, comprise absenteeism. Suggestions to the company operated independently of all except variable 11 as shown in Figure 1. Variable six, wages from the company in 1965, is treated as an independent variable. Other employment is composed of income from other sources, number of part-time jobs held by the employee and extent of farming as part-time job of the employee, or variables seven, 25 and 26.

No employment variable was entirely unrelated to the others as shown in Figure 1. Criterion group was positively related to seniority, mobility, suggestions to company and wages and seniority to mobility and wages. Absenteeism was negatively correlated with wages and positively correlated with other employment.

The means for the two criterion groups on the employment variables are shown in Table 3. The means for Group 2 employees were consistently higher than those for Group 1 on mobility, suggestions to the company and wages.

The data on absences from work, however, were inconsistent with the results on the other employment variables related directly to the company. Although the number of absences was approximately the same for the two groups of employees in 1965, those in Group 2 were absent for slightly more hours than those in Group 1.

According to Table 3, the employees in the two groups averaged about the same number of part-time jobs in addition to their work at the company, but Group 2 workers received slightly more income from their part-time employment. The extent of farming as a source of income other than the company was minor in terms of the number of employees involved. Four of the men in Group 1 were farming from 40 to 240 acres each, and three of the men in Group 2 were farming, with one raising livestock on a small acreage, one farming 13 acres and one farming 360 acres. Although less than half of the employees

Variable[a]	1	3	68	4	5	8	9	10	11	6	7	25	26
1													
3	96[b]												
68	63	62											
4	78	75	73										
5				32									
8													
9						94							
10						73	82						
11	36												
6	45	43	53			-36	-35	-43					
7						37							
25											53		
26						37	34				70	37	

[a] Code for variables:

Criterion group
  1. Group number (1 or 2)
  3. Wage group at time of the study
Seniority
  68. Number of years employed by company
Mobility
  4. Distance between beginning wage group and wage group at time of study
  5. Number of successful bids upward
Absenteeism
  8. Number of absences
  9. Total hours absent
  10. Absences due to illness
Suggestions to company
  11. Number of suggestions to company
Wages
  6. Wages from company for 1965
Other employment
  7. Income from other sources
  25. Number of part-time jobs held by employee
  26. Extent of farming as part-time job by employee

[b] In this and subsequent figures only correlations significantly different from zero at the one to five percent levels are included. For n=40, $r_{.01} = .40$ and $r_{.05} = .36$. All decimal points are omitted.

Figure 1. Correlation matrix for employment variables

Table 3. Means on employment variables by criterion group

Variable	Group 1	Group 2
Criterion group		
3. Wage group at time of study	2.20	10.20
Seniority		
68. Number of years employed by company	11.60	14.00
Mobility		
4. Distance across wage groups[a]	.25	6.70
5. Number of successful bids upward	2.25	2.65
Absenteeism		
8. Number of absences in 1965	4.55	4.50
9. Hours of absence in 1965	15.00	18.00
10. Hours of absence due to illness in 1965	7.15	9.25
Suggestions to company		
11. Number of suggestions submitted to company	10.25	20.20
Wages		
6. Annual wages from company in 1965	$6,550.00	$7,450.00
Other employment		
7. Income from non-company sources	$325.00	$370.00
25. Number of part-time jobs of employee	.35	.40
26. Extent of farming[b]	.40	.25

[a] Number of existing wage groups between beginning wage group and wage group at time of study.

[b] Code: 0=none, 1=raising livestock or farming 40 acres or less, 2=farming 109-150 acres, 3=farming 240-360 acres. All acreages reported were included in the coding.

reported incomes from sources other than the company, some men were committing major amounts of time to one or more part-time jobs.

The distribution of reported wages from the company and income from other employment is shown in Table 4. No man in Group 1 reported income in the highest category of wages from the company or from other employment. The range for Group 2 extended from the lowest to the highest categories for income from both sources.

Table 4. Distribution of reported incomes from company and other sources by group

Income	Group 1	Group 2
Wages from company		
$4,000 - 5,499	2	1
$5,500 - 6,999	12	3
$7,000 - 8,499	6	15
$8,500 - 9,999	0	1
Income from other sources		
None or less than $100	11	12
$100 - 999	6	3
$1,000 - 1,999	1	4
$2,000 - 2,999	1	0
$3,000 - 3,999	1	0
Over $4,000	0	1

D. Home-Environment Variables

The characteristics of the home environment include clusters of variables and individual variables. Results are reported for social participation of the family; housing; psychological characteristics of the wife; food, nutrition, and health; clothing; management of resources; family relationships; and authority patterns.

The intercorrelations among the variables describing social participation of family members are shown in Figure 2. With the exception of social mobility, the scores on all variables contributed to the family's social participation index. The correlation of .82 between variables 32 and 33 indicates that two-thirds of the variance in the social participation index for the family is in common with the wife's social participation index.

As shown in Table 5, the families of Group 2 had a higher mean score for the social participation indexes and were judged on the average somewhat more upwardly mobile socially than Group 1 families.

Variable		31	32	33	61	62	63	64
No. of organizations entire family	31							
Social participation index, wife	32	76						
Social participation index, family	33	84	82					
No. of organizations, church focus	61	59	58	45				
No. of organizations, community focus	62	56	53	43				
No. of organizations, entertainment	63	46	40	52		39		
No. of organizations, youth and socialization	64	40		38				
Social mobility	114	41	[illegible]	50		47		

Figure 2. Correlation matrix for social participation and mobility

Table 5. Mean social participation and mobility by criterion group

		Group 1	Group 2	Possible range
33.	Social participation index of family	4.55	5.15	0-16[a]
32.	Social participation index of wife	5.80	6.60	0-23[a]
31.	Number of organizations to which entire family belongs	5.35	6.55	actual no.
61.	Number of organizations with church focus	1.00	.85	actual no.
62.	Number of organizations with community focus	.60	1.15	actual no.
63.	Number of organizations with entertainment focus	.50	.30	actual no.
64.	Number of organizations with youth socialization focus	.70	.65	actual no.
114.	Social mobility[b]	3.50	3.90	1-5[c]

[a] Actual range for this sample. A score was calculated by weighting the number of organizations, extent of participation, and offices held. Detailed instructions for calculating may be found in the Appendix.

[b] Judgment based on interview data.

[c] Code: 1=downwardly mobile, 3=static, 5=upwardly mobile.

Group 2 families belonged to somewhat fewer church-related and entertainment organizations and to more organizations focusing on the community than did Group 1.

The measures of social participation, housing, psychological characteristics of the wife and management of resources appeared positively related to each other. Social participation correlated positively with the educational level of the wife and identification of religious leaders as a source of help with family problems.

The cluster of housing variables is shown in Figure 3. This variable was the only one that did not significantly relate to all other variables in the cluster.

Housing correlated negatively with number of children in the family. And that part of the housing cluster dealing with cleanliness, orderliness, aesthetics and repair of furnishings correlated negatively with the cluster on patriarchal authority pattern and with the extent to which handing down clothing was a source of family clothing. Housing correlated positively with educational level of the wife for items dealing with cleanliness and orderliness. Housing also correlated positively with the husband's hanging up his own clothing, the frequency with which the husband ate alone and prepared his own breakfast, the preference of the wife for one dress worth 14 dollars over two worth seven dollars, and the wife's judgment that the family had enough money for clothing.

Variable		27	28	29	34	35	37	38	39
House type	27								
Neighborhood	28	78							
Housing density	29	41	42						
House cleanliness	34	67	48						
House orderliness	35	64	52	35	86				
Aesthetic qualities	37	69	51	39	81	75			
Furnishings in repair	38	71	46		83	62	74		
Essential furnishings	39	67	48		69	62	71	76	

Figure 3. Correlation matrix for housing

In addition to the cluster of items dealing with housing, the comparison of housing means for the two groups shown in Table 6 includes three items dealing with attitude of the wife toward the housing. Wives of Group 2 were less satisfied with the housing and made more suggestions for improvement of the house. The means for house type and neighborhood were superior for Group 2, but the scores on cleanliness and orderliness were superior for Group 1.

Figure 4 reports the correlation matrix for a cluster of variables entitled psychological characteristics of the wife. These variables were the means of the judgments made independently by the two interviewers immediately after the interview. Bases for the judgments are explained in the Appendix.

Table 6. Mean characteristics related to housing by criterion group

Variable	Group 1	Group 2	Possible range
Housing			
27. House type	3.30	3.45	1-7[a]
28. Neighborhood	3.50	3.60	1-7[b]
29. Density	1.42	1.39	No. persons per room
34. Cleanliness	1.35	1.25	0-2[c]
35. Orderliness	1.35	1.05	0-2[c]
37. Aesthetic qualities	.90	.95	0-2[c]
38. Furnishings in repair	1.15	1.20	0-2[c]
39. Essential furnishings	1.15	1.05	0-2[c]
Attitude of wife toward housing			
50. House meets needs better now than when family moved in	.85	.65	0-1[d]
51. Difficult to get improvements	.35	.60	0-1[d]
67. Number of suggestions for house improvement	.95	1.35	Actual no.

[a] Code: 1=very poor, 2=poor, 3=fair, 4=average, 5=good, 6=very good, 7=excellent. See appendix for further explanation.

[b] Code: 1=very low, 2=low, 3=below average, 4=average, 5=above average, 6=high, 7=very high.

[c] Code: 0=poor, 1=medium, 2=good.

[d] Code: 0-no, 1=yes.

Variable		54	55	56	57	58	59
Self-actualization	54						
Self-esteem	55	81					
Ability to verbalize	56	53	66				
Ability to understand questions	57	66	67	68			
Willingness to express ideas	59	31	31	31	39		

Figure 4. Correlation matrix for selected psychological characteristics of the wife

Psychological characteristics of the wife correlated positively with educational level of the wife and extent to which the husband used leisure time for recreational activities. Some variables correlated with the number of home-related tasks performed by the husband, the wife's knowledge of food and nutrition and the number of newspapers to which the family subscribed. The psychological characteristics also correlated positively with the type of clothing worn by the husband to work and the extent to which the wife reported that her husband was conscious of the clothes that she wore. They correlated negatively with the extent to which the wife identified behaviors that would occur at work if her husband dressed differently from his fellow workers.

The first five variables included in Table 7 represent the wife's psychological characteristics. The wives of Group 2 had higher means than those of Group 1 on the first four variables. There was essentially no difference between the two groups in terms of willingness to express ideas.

The last three variables in Table 7 are treated as independent variables. They did not correlate with other variables in the table except for correlations of .31 and .38 between variable 109 and the variables of self-actualization and self-esteem, respectively.

On the average, Group 1 wives said they would not want their sons to have the same job as that of their husbands. The average response of Group 2 wives to the same question was that it would be all right for their sons to have the same job as that of their husbands under certain circumstances. One circumstance frequently mentioned was the interest or desire of the son. Two wives in Group 1 told the interviewers that they would not want their sons to do factory work. None of the Group 2 wives identified factory work as the kind of work that they would not like their sons to do. The latter statements were in response to a question that preceded the one directly related to the attitude toward the job of the husband.

Group 2 wives mentioned a greater number of home characteristics that they believed would influence the husband on the job than did Group 1 wives. Of the sample of 40 wives, 16 stated that nothing would make a difference. Reasons given for this answer were that the atmosphere was totally different at work and that work was so much different from home. The remaining 24 wives listed ways in which they believed their home might influence their husbands' work on the job. Harmony in the home, a pleasant home, things going well and a cheerful attitude seemed important to several homemakers. If the husband were worried or nervous or had problems at home such as arguing, financial problems, illness or children not getting along, it might influence his work. Six said that a good breakfast, lunch and a hot meal waiting when he comes home were important. A well-organized, clean home was mentioned by five homemakers. Sleep and rest were mentioned by four. Another homemaker

Table 7. Means for psychological characteristics of the wife by criterion group

Variable	Group 1	Group 2	Possible range
Cluster of psychological characteristics			
54. Self-actualization[a]	2.30	3.00	1-5[b]
55. Self-esteem[a]	2.60	3.35	1-5[b]
56. Ability to verbalize[a]	.90	1.25	0-2[c]
57. Ability to understand questions[a]	.65	1.15	0-2[c]
59. Willingness to express ideas[a]	1.00	.95	0-2[d]
Additional psychological characteristics			
60. Attitude toward husband's job[e]	.25	.85	0-2[f]
108. Attitude toward women working	.40	.70	0-2[f]
109. Number of home characteristics that wife said would influence husband on the job	.70	1.15	Actual no.

[a] Judgments made by interviewers without knowledge of criterion group of family.

[b] Code: Range was from 1=low through 5=high. See Appendix for further explanation.

[c] Code: 0=poor, 1=average, 2=good.

[d] Code: 0=unresponsive, 1=average, 2=expressive.

[e] Based on response to question, "Would you like for your son to have the same job that your husband has now when he grows up?"

[f] Code: 0=no, 1=yes under certain conditions, 2=yes.

mentioned that it would help to listen to him when he talks about his work.

A number of the variables related to food, nutrition and health are reported as independent items. There were insufficient correlations among the items to form any clusters, but findings in relation to them and certain employment variables justified their inclusion in the report.

In the areas of food, nutrition and health, as reported in Table 8, the differences between the two groups vary according to the type of behaviors being examined. The mean dietary intakes for the two groups were similar. For both groups the husband's diets averaged good and those of the wives were poor. The score for the husband would be expected to be the more reliable of the two measures because it was based on a three-day record in contrast to the recall of food intake for a 24-hour period for the wife. The latter was judged adequate for a study of groups by the nutrition consultant to the project. The scores for dietary intake for husband and wife correlated negatively with the number of children at home. The wife's dietary intake correlated positively with housing and educational level of the wife. The dietary intake for the husband correlated positively with extent of structured planning for use of family resources.

Two measures of the wife's knowledge regarding food and nutrition, ability to make food substitutions and knowledge of food fallacies, had a positive correlation of .44. Knowledge of nutrients did not correlate significantly with the other two. The mean scores for the wives on knowledge of food and nutrition were higher for Group 2, and the same group of wives reported more written planning and use of information available when purchasing food.

The results related to health, as shown in Table 8, probably reflect a confounding of actual health status and sensitivity to deviations from optimum health. The wives of Group 2 identified a larger number of health problems in their families including problems of overweight.

The problem of overweight on the part of the wife correlated negatively with judgments of her sense of clothing adequacy, quality of her wardrobe and the social mobility of the family. Overweight on the part of the husband correlated positively with the educational level of the wife and social participation index of the family.

Means for the two criterion groups on individual items dealing with clothing behaviors are reported in Table 9. Additional clothing behaviors are reported as a part of the management of resources cluster. Group 2 means were higher than for Group 1 on status of the stores patronized in the purchase of family clothing, the type of clothing worn by the husband to work, the extent to which the husband selected his own clothes, the extent to which the husband was conscious of his own clothing and that of his wife, the interest of the wife in making changes in her personal clothing and the choice of the wife in buying one $14 dress rather than two $7 dresses.

The cluster of variables represented in Figure 5 is, with the exception of the weekly food budget, a combination of some of the ratings on behaviors related to management, relationships and

Table 8. Mean behaviors related to food, nutrition, and health by criterion group

Variable	Group 1	Group 2	Possible range
Score on record of dietary intake:			
83. 3-day record of husband	1.90	2.05	0-3[a]
84. 1-day record of wife	.55	.40	0-3[a]
Knowledge of wife regarding:			
78. Ability to make food substitutions	1.55	2.00	0-3[b]
79. Nutrients	3.15	3.45	0-10[b]
82. Food fallacies	7.45	9.75	0-18[c]
Purchase of food by wife:			
69. Extent of written planning	1.85	2.40	0-4[d]
70. Conscious use of advertising	4.05	4.50	0-8[e]
72. Use of information on food labels	1.60	2.05	0-4[f]
Health:			
80. Wife overweight	.30	.50	0-1[g]
81. Husband overweight	.15	.35	0-1[g]
85. Number of family health problems reported	.75	1.15	actual no.
86. One or more family members identified as lacking in energy	.45	.75	0-1[g]

[a] Code: 0=poor, 1=fair, 2=good, 3=excellent.

[b] Number of correct answers.

[c] Possible range of coded scores. See explanation in Appendix.

[d] Code: Sum of (1) list is written 2=always, 1=sometimes, and 0=never and (2) list includes 2=everything, 1=almost everything, and 0=few or no items.

[e] Code: Sum of responses to four items on use of advertising with each scored 2=almost always, 1=sometimes, 0=almost never.

[f] Code: Sum of responses to two items on use of food labels with each scored 2=almost always, 1=sometimes, 0=almost never.

[g] Code: 0=no, 1=yes.

clothing made by one or more judges after reviewing the interview data regarding each family. Although the correlations may be due in part to relationships among the behaviors and in part to halo effect, they are discussed as a cluster of variables and entitled management of resources. Management of resources was positively related to educational level of the wife and knowledge of nutrients.

Means for individual items as well as for the cluster on management of resources are reported in Table 10. In general the means for Group 2 were higher than those for Group 1 on the cluster, regularity of saving, and number of tasks performed by the husband

Table 9. Means for clothing behaviors by criterion group

Variable	Group 1	Group 2	Possible range
40. Status of stores patronized in purchasing family clothing	1.65	2.15	0-3[a]
Behaviors of husband			
98. Type of clothing worn to work	.10	.70	0-1[b]
97. Is clothes conscious - own clothes	1.40	1.80	0-2[c]
96. Is clothes conscious - wife's clothes	1.05	1.35	0-2[c]
Behaviors of wife			
101. Would make change in personal clothes	1.20	1.60	0-2[d]
102. Would buy $14 dress over two $7 dresses?	.65	1.10	0-2[e]
112. Sense of clothing adequacy	2.70	2.65	1-5[f]

[a] Code: Mean rating for stores was used with 0=none, 1=low-priced, 2=medium-priced, and 3=high-priced.

[b] Code: 0=jeans, 1=slacks.

[c] Code: 0=no, 1=some, 2=yes.

[d] Code: 0=none, 1=inability to verbalize, 2=some.

[e] Code: 0=$7 ones, 1=uncertain, 2=$14.

[f] Code: 1=dissatisfied to 5 = highly satisfied.

Variable		110	111	113	115	116	118	119	77
Degree of use of consumer information on clothing by wife	110								
Knowledge of textiles - wife	111	88							
Wardrode quality for wife	113	56	48						
Extent of harmony in family	115	59	50	42					
Extent of communication in family	116	57	60	42	78				
Extent of structured planning by family for use of money	118	61	60	59	54	55			
Knowledge of family finances - wife	119	40	47	47	41	51	80		
Weekly budget for food	77	40		48	47	54	62	62	

Figure 5. Correlation matrix for management of resources

Table 10. Means of selected management behaviors by criterion group

Variable	Group 1	Group 2	Possible range
Cluster on management of resources			
110. Degree of use of consumer information on clothing by wife	2.70	3.40	1-5[a]
111. Knowledge of textiles by wife	2.45	2.95	1-5[a]
113. Wardrobe quality for wife	2.80	2.80	1-5[b]
115. Extent of harmony in family	2.90	3.45	1-5[c]
116. Extent of communication in family	2.90	3.10	1-5[d]
118. Extent of structured planning by family for use of money	3.15	3.60	1-5[a]
77. Weekly budget for food	.60	.55	0-1[e]
Individual items			
105. Regularity of saving by family	1.25	1.65	0-2[f]
107. Number of tasks husband performed at home	2.55	2.95	0-6[g]
87. Religious leaders identified as source of help with family problems	.30	.55	0-1[e]
88. Relative or friend identified as source of help with family problems	.50	.35	0-1[e]
89. Professional person (physician, lawyer, school principal) identified as source of help with family problems	.35	.20	0-1[e]
90. Wife indicated family would go to no one for help with family problems.	.15	.25	0-1[e]

[a] Code: 1=none to 5=much.
[b] Code: 1=low to 5=high.
[c] Code: 1=intense conflict to 5=consistent harmony.
[d] Code: 1=uncommunicative to 5=highly communicative.
[e] Code: 0=no, 1=yes.
[f] Code: 0=none, 1=occasionally, 2=regularly.
[g] Code: actual number.

at home. The two groups do not differ greatly in terms of their use of resource people when the family has a problem. In the respective groups 15 and 25 percent of the homemakers said that they would go to no one when the family had a problem.

Three variables related to the husband's role in making family decisions or the extent to which the authority pattern appeared patriarchal and makes up a cluster shown in Figure 6. Additional data available from the interviews but not analyzed during the time period for this project may provide further clarification of the roles of the husbands and wives in the families of this study.

Behaviors categorized under family relationships are reported in Table 11. The wives of Group 1 scored their marriages as slightly happier on the Terman Marital Happiness scale than was true for Group 2. Questions relating to the validity of this measure are discussed in a later section. The families of the two groups did not differ much on the remaining variables; however, the means for Group 2 were in the direction of democratic decision-making rather than the husband's having a dominant role in the decision-making. Two items in the management cluster shown in Table 10, refer to family relationships. The Group 2 families exhibited slightly more harmony in the family and perhaps better communication.

Variable		100	104	117
Husband selects own clothes	100			
Husband decides regarding expenditures	104	36		
Extent patriarchal as to authority pattern	117	50	59	

Figure 6. Correlation matrix for extent patriarchal in authority pattern

Table 11. Mean behaviors concerning family relationships by criterion group

Variable	Group 1	Group 2	Possible range
48. Marital happiness scale	5.65	5.10	1-7[a]
Cluster on authority pattern			
100. Husband selects own clothes	1.45	2.00	0-3[b]
104. Extent to which husband makes decisions regarding expenditures[a]	1.25	1.05	0-2[c]
117. Extent patriarchal[b] (on continuum from matriarchal to democratic to patriarchal)	3.30	3.10	1-5[d]

[a] Code: 1=very unhappy to 7=perfectly happy.
[b] Code: Selected by 0=gifts, 1=wife alone, 2=husband and wife, 3=husband alone.
[c] Code: 0=wife, 1=both, 2=husband.
[d] Code: 1=matriarchal, 3=shared authority, 5=patriarchal.

The number of newspaper and magizine subscriptions for the family did not correlate significantly with each other or cluster with other variables. Number of magazines was more discriminating among the families than the former with the standard deviation for number of newspaper subscriptions being .91 and that for magazine subscriptions being 2.10 on the same scale. The number of newspapers taken correlated positively with knowledge of food and nutrition by the wife. Both the number of newspapers and of magazines correlated positively with some of the variables in management of resources, especially with knowledge and degree of use of consumer-related information. Number of newspapers was positively related to conscious use of advertising and negatively related to the extent to which the wife identified behaviors which would occur at work if her husband dressed differently from his fellow workers.

E. Relationships Between Employment and Home-Environment Variables

The relationships between the employment clusters and home environment clusters were studied by analyzing the intercorrelations between the variables in each of the clusters. The report also includes selected individual variables.

No relationships were apparent between the employment cluster, criterion group and any of the home environment clusters. Criterion group did, however, correlate positively with the following individual variables; age of father when first child was born, status of stores patronized, number of magazines to which the family subscribes, ability of the wife to understand questions from the cluster of psychological characteristics, attitude of the wife toward the husband's job, use of leisure time by husband to work on the house, number of suggestions for improvements in the house by the wife, knowledge of food fallacies by the wife, type of clothing worn by the husband to work, the husband's selection of his own clothes from the cluster on authority pattern, and the preference of the wife for a dress worth 14 dollars rather than two worth seven dollars.

Seniority correlated positively with the type of clothing worn by the husband to work, the variables regarding the wife's knowledge of food and nutrition, two psychological charateristics of the wife: self-actualization and ability to understand questions, attitude of the wife toward employment for women, preference of the wife for a dress worth 14 dollars, knowledge and use by the wife of clothing information for the consumers and harmony in the family from the management cluster, number of suggestions for improvements in the house, selection of his clothes by the husband from the cluster on authority pattern and number of newspapers to which family subscribed. Seniority correlated negatively with number of children in the family.

Relationships between mobility and home-environment variables are reported in terms of the correlations between the distance between the beginning wage group and the wage group at the time of this study. The number of successful bids upward appeared to correlate erratically with other variables. Based on the former variable, mobility correlated positively with number of newspapers and magazines, ability of wife to understand questions from the cluster of psychological characteristics, knowledge of food fallacies, type of clothing worn by the husband to work and preference of the wife for a dress worth 14 dollars. Mobility correlated negatively with number of children in the family.

Absenteeism correlated positively with number of children, number of moves by the family during the preceding five years, identification of one or more family members as lacking in energy and number of home characteristics that would influence the husband on the job as identified by the wife. Absenteeism correlated negatively with regularity of saving by the family. One type of absenteeism, absences due to illnesses, correlated negatively with the housing cluster, adequacy of money for clothing as reported by the wife and the cluster on management of resources. Absences due to illness correlated positively with the cluster on extent of patriarchal authority pattern.

Suggestions to the company correlated positively with number of magazines to which the family subscribed; three of the psychological characteristics of the wife, self-actualization, ability to verbalize and willingness to express ideas; number of suggestions wife had regarding improvements for the house; and extent of structured planning for use of resources in the family from the cluster on management. There was a negative correlation between suggestions to the company and the husband's commenting on the clothing of the wife.

Wages from the company correlated negatively with number of children. Home-environment variables with which wages correlated positively included house type, aesthetic qualities and furnishings in repair from the housing cluster; number of suggestions for house improvement; social participation index of the family; number of newspapers to which family subscribed; the psychological characteristics of self-actualization, ability to verbalize and to understand questions; the variables on knowledge of food and nutrition; preference of the wife for a dress worth 14 dollars over two worth seven dollars; and the cluster on management of resources.

Other employment is discussed in terms of its components. Income from sources other than the company correlated positively with education of the husband, house type and the score of the wife on dietary intake. Both income from other sources and extent of farming correlated positively with the social participation index of the wife and housing density, and negatively with knowledge of nutrients. Extent of farming correlated positively with the number of church-related organizations to which the family belonged and negatively with judged harmony in the family. Both extent of farming and number of part-time jobs correlated negatively with the husband's using leisure time to work on the house although income from other sources correlated positively with this latter variable.

F. Methods of Obtaining Information

The methods used in obtaining the data were effective for the purposes of the study. Observations regarding the methods are presented in the Discussion.

IV. DISCUSSION

A. Comparison of Sample with Others in Population

The differences between the two criterion groups on characteristics planned to be common for the groups appear attributable to differences in the employees in the two strata of the population and not due to sampling error. The differences between the two groups on the means shown in Table 1 as well as the differences in the number of employees in the two strata may be explained by a number of conditions. Seniority was a major consideration in determining opportunities for advancement including opportunities for apprenticeship training. This role of seniority may explain, in part, the differences between the ages of those employees in the lower wage groups at the time of the study and those in the upper wage groups including journeymen in skilled trade departments.

In this study, educational level of the employees when first hired was controlled by matching the two groups on this variable. The groups of employees were so similar in educational level that any differences between the groups on other characteristics were assumed not to be associated with this characteristic. At the time of the study the 12 men in wage group 11 had completed apprenticeship training. Three of the 12 had less than a high school education and would not be eligible for apprenticeship training if they were applying under current standards.

B. Family Descriptions

The differences in average ages of the employees and their wives in the two criterion groups as shown in Table 2 presented a confounding element in analyzing variables related to employment and to home environment. Data relating to child development and family relationships have not been completely analyzed, but the interviewers tentatively concluded that the presence of older children in the families probably increased the complexity of problems that the families were aware they were facing. For example, the interviewers observed that some families with children of pre-school age had used little or no money resources for clothing for the wife and children, but families with daughters and sons in high school indicated that clothing was often of major importance to these youths; and although amounts were not known, more money was being used for clothing for these boys and girls. In the area of communication between children and parents and the severity of the problems recognized by parents in guiding their children, more problems were reported in relation to older children than for younger children.

Group 2 employees were older when their first child was born than were those in Group 1. This difference may be associated with the dates of the Korean conflict.

As shown in Table 2, Group 2 wives had a higher level of education than those in Group 1 although the educational levels of the husbands were comparable. Educational level of the wife appeared to be associated with identification of the husband in the upper wage groups.

Although the number of children in the families of the two groups was similar, the proportions of children in the different age groups varied. Very few of the families had children who were no longer at home.

C. Employment Variables

The two criterion groups differed from each other on mean wage group at the time of the study by eight wage groups as shown in Table 3. In Group 2, there were 12 journeymen in skilled trades and eight men in leadership jobs in wage groups lower than those for skilled trades. The men in Group 1 did not have leadership jobs.

The men in Group 2 had more seniority than those in Group 1 as shown in Table 3. This variable alone, however, does not explain the differences between the two groups on mobility.

The measure of mobility across wage groups was a crude measure but was assumed to be valid. Although no one employee would necessarily move through all wage groups (some wage groups include only limited types of work.), each wage group represents a higher level of wage than the preceding one. The difference between the two groups on the first measure of mobility in Table 3 was 5.45 wage groups. The company gives employees priority over non-employees in filling any vacancies. That the company has hired new employees for wage groups higher than those held by Group 1 indicates that the men in Group 1 have not chosen to bid for some jobs in higher wage groups.

The number of successful bids upward appears to be less comparable for all men in the study. Employees could bid on jobs available but the number of vacancies and therefore the number of opportunities for bidding varied from department to department. Some of the men in the study had a number of successful bids upward, but were still in the wage group in which they started. This was possible because of involuntary downgrading associated with reductions in the work force or voluntary downgrading. This measure would probably be even less comparable among different companies than was true in this study of employees of one company.

Hours of absence differentiated between the two criterion groups, but number of absences did not. The difference was not in the direction anticipated. Further inspection of the data regarding absences due to illness revealed that nine of the men in Group 1 and six of the men in Group 2 were absent due to illness. No explanation was found in this study for the results on absences. One of the six men in Group 2 was absent 85.9 hours due to illness. This was over twice as many hours as any other employee.

The cooperating company had a system of recording the numbe of suggestions submitted by each employee and paying the employee for suggestions that resulted in company savings. The amount paid the employee or group of employees for the suggestion was in proportion to the amount saved by the company in a given time up to a certain maximum amount. This variable discriminated between the two groups of employees, although the judgment sampling would account for some of the difference.

Although the two criterion groups of employees differed greatly on wage group at the time of the study, the differences between the two groups in terms of annual wages from the company were less marked as shown in Tables 3 and 4. The aim of identifying two employee groups who differed in major ways in their employment records was not achieved to the extent hoped. Annual wages of the two groups of employees would be described as similar rather than contrasting. There are several possible explanations for this. The men in Group 1 were in jobs that provided eligibility for incentive rates or straight hourly rates. On incentive rates the employee earned on the basis of production of acceptable products, and fast, efficient, accurate worker could earn more on incentive rates than on straight hourly rates. The men in Group 2 were in jobs that did not provide incentive rates although the regular hourly rates were higher in the upper wage groups than in the lower wage groups. Some of the men in the upper wage groups, however, were in jobs for which they received an additional pay because of leadership functions that they performed.

Wages were also affected by the shift that the man worked. The hourly wage for the afternoon shift was a number of cents higher than for the day shift; likewise, the night shift that began around midnight had an even higher hourly wage. Some workers worked rotating shifts; others consistently worked on the same shift throughout the year.

Because the reporting of wages appeared to be a sensitive matter, the categories of wages from the company were set up so that each category included a spread of $1500. Perhaps in future studies a spread of $1000 would be adequate to both free the employee to respond and provide for increased discrimination among wage levels.

Proportionately the difference between the two groups on income from sources other than the company was the same as that for annual wages as shown in Table 3. Seven of the 40 men were farming. For some of these seven families the owning and operation of a farm appeared a major goal.

Employment variables that produced fruitful results and that could be considered in further studies included wage group at the time of the study, mobility across wage groups, annual wages from the company, number of suggestions submitted to company, hours absent, extent of farming and income from sources other than the company.

D. Home Environment Variables

For both the social participation index of the family and of the wife the scores for Group 2 families represented the entire possible range. For the same variables the range for Group 1 was from 0 to 12 for the family and 0 to 16 for the wife.

That all the men had been employed by the company for 10 to 13 years indicated that any geographic mobility of the family had been limited to a relatively small geographical area. Any lack of social participation was probably not because of newness to the community. A random sample of employees would probably vary much more in terms of geographical mobility than was true for this sample.

Like many of the measures used in this study, the criteria for judging most of the characteristics of housing need further refinement. For those cases in which the independent judgments of the two interviewers regarding house type and neighborhood differed by more than one category, the principal investigator and interviewers made a return trip to the neighborhoods, observed the houses from the outside, discussed the criteria and observation and came to a common agreement as to the score. It was not possible to follow the same procedure, of course, regarding characteristics of the inside of the house. In general, the independent judgments of the interviewers were similar or the same. The mean of the two judgments was used.

Although the differences between the two groups on the housing variables were minor, the wives of Group 2 believed that their houses, which were slightly superior to the houses of Group 1, met the needs of the family less well. The response on the latter variable is consistent with the responses on the number of suggestions for house improvement.

The measures of psychological characteristics shown in Table 7 were admittedly crude. The criteria used are explained in the Appendix. The scores for the women in each of the two groups included the complete range for self-actualization, self-esteem, ability to understand questions, and willingness to express ideas.

A question can be raised as to whether the diets of women were as poor as the dietary scores intake would indicate. The interviewers recorded the dietary intake at the time of the interview by asking questions of the wife in regard to her food consumption for the preceding 24 hours. It is possible that some snacks or tastes of food at irregular times were not recalled or were not considered as a part of the dietary intake. The interviewers, however, attempted to phrase questions in such a way that such foods would be recalled and included. The 24-hour period never coincided exactly with that of a complete day; that is, it always included part of the meals from two different days. The researchers question that this affected the quality of the diets recorded, however, since there was little or no indication that the wives planned the meals for a day in relation to any particular nutritional guide. Most of the wives diets were low in most of the food categories considered in the scoring method. The diets of many of the men were also low in a number of the food categories.

All three scores relating to knowledge of food and nutrition were based on responses to a group of items. In each instance, the items really comprised a test. The test on food fallacies was the only one in which the degree-of-certainty method of scoring that is explained in the Appendix was used. The scores indicated a further need for knowledge related to food and nutrition, and the diets indicated a need for applying the knowledge that was known.

The status of the stores from which the family clothing was purchased varied. The actual stores named by the women were rated on general categories of quality and cost of merchandise by the interviewers.

The type of clothing worn to work was one of the variables that varied most consistently with criteria groups in the direction anticipated. The two types of clothing were jeans and T-shirts worn mostly by Group 1 and slacks and sport shirts or matching sets of work shirts and pants worn mostly by Group 2.

The question relating to the $14 or two $7 dresses functioned effectively in differentiating between the two criterion groups. Some of the women who chose the $7 dresses indicated that they did not go very many places other than home, that the greater quantity would be appreciated and that the quality would be satisfactory for around the house. The difference in income between the two groups may have provided the additional margin for clothing.

The response to the question concerning to whom the family would go in case of family problems indicated that these families were not accustomed to using a wide variety of community resources in helping to solve any family problems that arose. There may be some question as to the meaning that they gave to the word, problem.

The number of tasks performed by the husband at home was arbitrarily reported in Table 10 in terms of its relationship to management of human resources. Some of the tasks included care of the lawn and house as well as tasks performed within the house.

The researchers had questions regarding the validity of the Terman marital happiness scale in terms of the responses received from the wives in this study. Although it would not be possible to draw definite conclusions on the basis of the present study, the responses on the marital happiness scale appeared, in some instances, inconsistent with other information provided by the homemaker.

The variable in Table 11 entitled extent patriarchal in authority pattern involved the extent to which authority was placed in one individual or was shared by both husband and wife and the extent to which the husband or the wife appeared to be playing the dominant role in making decisions. Since the two aspects were combined in one continuum, the democratic, shared authority pattern is the middle value on the scale. Thus, the findings in Table 11 indicate more shared responsibility in Group 2 than in Group 1.

E. Relationships between Employment and Home-Environment Variables

The relationships between criterion group and home-environment variable were analyzed by the comparison of group means and the inspection of correlations between criterion group and other individual variables or clusters. Although criterion group correlated significantly with relatively few individual variables, three-fourths of the group means for Group 2 were in the direction expected and many of the others were approximately the same for the two groups, this indicated that more relationships could be expected if the individual measures are refined, scores are obtained for clusters of items related to home environment rather than for individual items and greater differences in employment criteria are obtained in the sample. The individual items with which criterion group correlated appeared to reflect social status, increased reading of magazines, a positive attitude toward the husband's job, shared responsibility for maintaining and improving the house, more knowledge about certain aspects of homemaking by the wife, a preference for higher quality of material goods and a choice of clothing by the husband consistent with his level of work.

Seniority correlated positively with a number of the home environment variables. Although type of clothing worn by the husband to work related to seniority as well as to several other employment variables, the data from the present study are inadequate for explaining whether the type of clothing worn depends on what is worn by the other workers in similar positions or whether the type of clothing worn played a role in advancement to higher level positions. It is possible that clothing, as a symbol of self-image, reflected the image that the individual wished to convey to himself and to other workers.

The other variables with which seniority correlated appeared to describe a home in which the homemaker was knowledgeable regarding food and nutrition and information needed by the consumer; was able to understand questions and alert to ways of making improvements in the home; was self-actualizing and accepted employment for women; desired material goods of high quality; was able to establish and maintain harmony in the family; and had a husband who assumed such individual responsibility as selecting his own clothes.

Mobility across wage groups correlated with variables similar to those for seniority. Again the picture was of a knowledgeable wife, a family who subscribed to a number of newspapers and magazines, a husband who wore the type of clothing expected on the job and a wife who preferred material goods of high quality.

There may be a number of explanations for the positive correlation between absenteeism and number of children. Further analysis of the types of absences in this respect may be helpful. Whether the increased absences were associated with illnesses of the children, need for caring for the children for other reasons, or taking the children to various activities is not known. The relationship between hours of absences and number of characteristics of the home that the wife believed would influence the husband on the job may indicate that some of the absences have been because of problems or incidences associated with the home. This is not known from the present data. The negative correlation between absences and regularity of saving may be explained by a family's ability to predict future events and plan ahead to meet them satisfactorily without unnecessary penalties.

The more adequate the housing, the higher the scores on management of family resources, and the greater the extent of sharing of responsibility by the wife and husband, the fewer the absences due to illness tended to be. Such a relationship may be reflecting an improvement of general welfare of the family that may be associated with the ability of the wife to define her responsibilities as a co-manager of the family and, in many respects, be the major manager of many of the homemaking responsibilities.

Number of suggestions to the company correlated with variables that relate to openness of communication of ideas, alertness to ways of improving existing conditions in the home and extent of planning ahead to achieve goals.

An additional aspect of home environment with which wages from the company correlated included the social participation index of the family. Other variables appeared to be describing some of the same home characteristics that related to the other employment variables.

The results in relation to other employment need to be interpreted in the light of the fact that less than one-half of the employees earned over $100 from sources other than the company. One possible explanation for the positive relationship between education of the husband and income from other sources is that the higher level of education qualified the man seeking part-time employment for higher levels of part-time jobs just the same as it qualified him for higher levels of full-time jobs. Another possible explanation is that the characteristics which contributed to his achieving higher education also contributed to his being able to locate more remunerative part-time jobs and to manage his resources to earn more from part-time jobs, possibly by working a greater share of the time.

In the husband's questionnaire, he was asked to check the category of income from the company and from other sources that most accurately described his income. The intent was that he report the income that he earned. It is possible, however; that the request could have been interpreted to mean family income and in some instances where the wife worked part-time, some of her income may have been included. The instructions to the husband in further studies need to be clarified.

The relationship between extent of farming and the social participation index of the wife may be explained in part by the number of church-related organizations in which the wives participated. This suggests that farming is associated with rural values including active participation in religion.

There was a negative relationship between number of part-time jobs as well as extent of farming with the husband's working on the house during his leisure time. Part of the lack of working on the house is undoubtedly associated with lack of leisure time.

F. Methods of Obtaining Information

Obtaining the data by interviews proved successful in providing an opportunity for the interviewers to obtain information beyond that included in the interview schedule, pursue prospective leads for more complete knowledge and observe the homemaker interacting with other family members within her own home. It was possible to establish rapport with the homemakers, and this was probably an important contributor to obtaining cooperation in such a comprehensive and time-consuming study and in obtaining data of a personal nature.

The presence of two interviewers during each interview appeared justified from two standpoints. First, in half of the homes the second interviewer was needed to supervise the children's play or to assist with household tasks to free the homemaker for the interview or was needed to talk with the husband to provide privacy for the interviewee. Second, this procedure also served as a check for reliability between interviewers of judgments made.

The homemakers were not knowledgeable about some of the needed information concerning their husbands. In future studies, it would be helpful if information concerning opinions, attitudes, behaviors and family background of the husband could be obtained directly from the husband. Assuming the company data were correct, the wives made 16 errors in age and educational level of their husbands.

Conducting a study with a cooperating company provided reliable employment data for those employees in the sample. If a study were conducted of men sampled from the general population, the reliability of employment data given by the men themselves would be subject to human errors, such as central tendency, those associated with recall and freedom to provide accurate information.

V. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The sections of this chapter are organized around the three objectives of this study with conclusions, implications and recommendations presented in relation to each objective. All conclusions are tentative and are intended to serve as a basis for further study.

A. First Objective

A number of characteristics of the home environment of skilled, semi-skilled and unskilled workers appear related to the employment record of the husband. Based on the intercorrelations among variables, clusters of characteristics of home environment and employment were tentatively identified. Further studies should include the formation of clusters of related variables after data are obtained from a sample larger than the one in the present study.

Characteristics of the home environment that appeared positively related to the interrelated employment variables, criterion group or wage group at time of the study, mobility, wages, and seniority, were psychological characteristics of the wife, number of suggestions for house improvement, type of clothing worn by the man to work, preference of the wife for a 14 dollar dress over two seven dollar dresses and knowledge of food and nutrition on the part of the wife. Knowledge of textiles and clothing by the wife was positively related to seniority; attitude of the wife toward the job of the husband, to wage group; extent to which the husband selected his own clothing, to wage group and seniority; and management of resources, to wages. The housing cluster, quality of the wife's wardrobe and social participation index of the family were positively related to wages, income from other sources, and, in the case of social participation, to extent of farming. Criterion Group 2 had higher means than Group 1 on three-fourths of the home-environment variables.

Three of the home-environment variables correlated positively with suggestions to the company. These included management of resources, psychological characteristics of the wife and number of suggestions for house improvement.

Number of children in the family and geographic mobility of the family correlated positively, and regularity of saving by the family correlated negatively with absenteeism. Absences due to illness correlated negatively with the housing cluster and management of resources and positively with extent to which the family was patriarchal in authority pattern.

Additional relationships are anticipated between characteristics related to family relationships and child development and employment variables when these data are analyzed further. Recommendations regarding including these aspects of home environment in further studies will be based on the findings.

It is recommended that the relationships identified in this study be investigated further in a survey of employees in industrial, distributive and service jobs for which vocational and technical education provide training. A number of the measures of the variables need refining to provide for increased reliability.

B. Second Objective

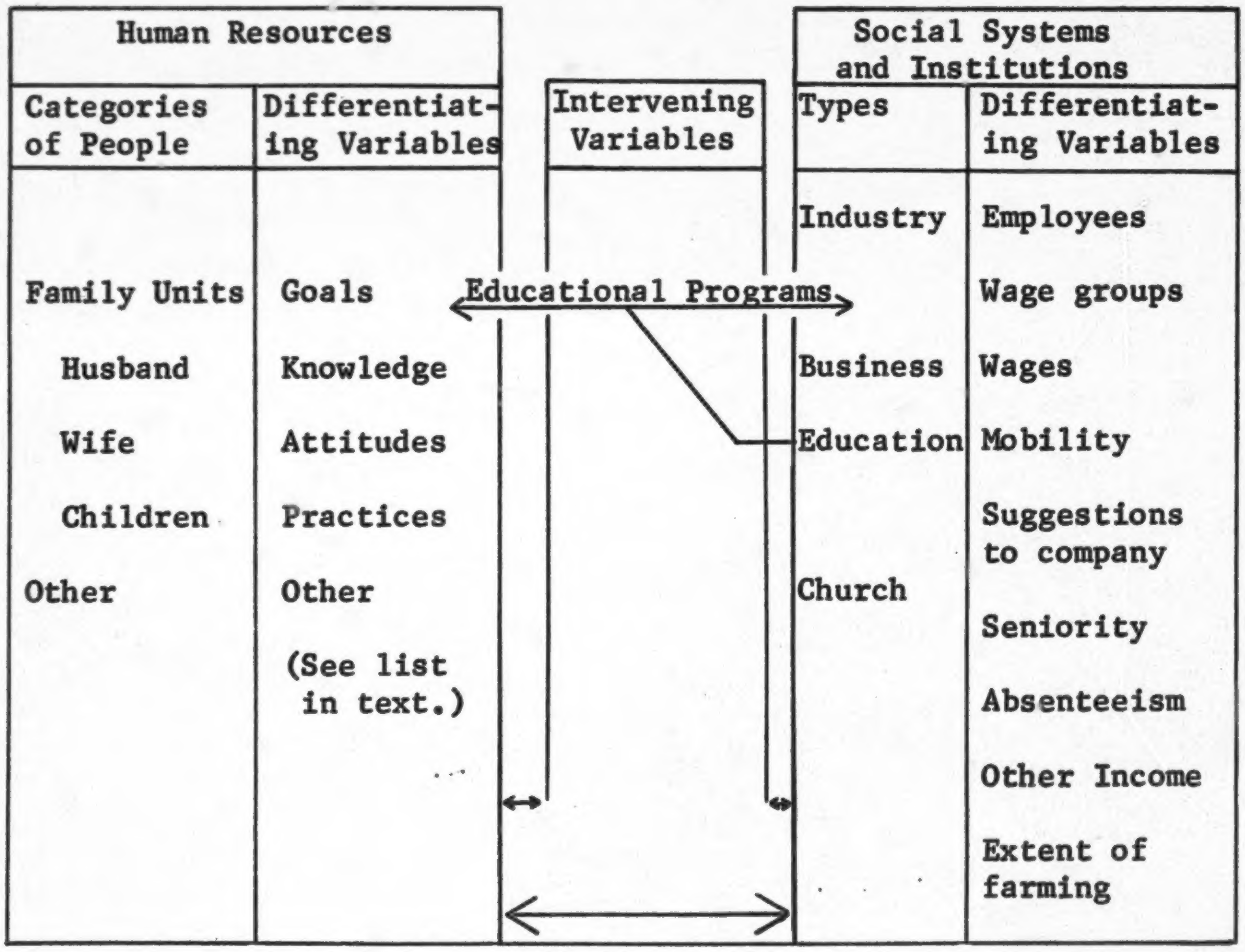
The method of defining a population and sampling employees of a cooperating company was efficient in terms of locating employees and their homes, obtaining reliable and valid data regarding employment, and gaining the cooperation of the interviewees. It is recommended that a similar procedure be used in studying employees of a number of firms.

Conducting interviews using interviewer pairs is recommended for a survey designed to follow up this exploratory study. The role of a second interviewer in freeing the homemaker for a two-hour period, especially when there were pre-school children to be supervised, facilitated the interviewing. It is recommended that the husbands as well as the wives be interviewed. In this case a pair of interviewers could be used exclusively for the interviewing of the husband and wife separately. Extra time would probably need to be allowed for such interruptions as those associated with the supervision of children's play. If the interviews needed to be conducted when all children were home, privacy for the interviews would probably be difficult to obtain in some homes.

C. Third Objective

A tentative model for studying relationships between home environment and employment as a basis for making recommendations for vocational and technical education programs is shown in Figure 7. This model is an adaptation of one part of an exploratory model for analyzing vocational and technical education being developed by the Strategic Intelligence Unit of the research and development effort of which this study is a part. The portions of the model are only partially completed.

The model portrays family units, composed of a nuclear family similar in composition to those in this study, as one type of human resource. The family has been considered a social unit and an economic unit from the standpoint of consumption and is proposed that the family unit plays an additional role in the economic world.



Human Resources			Social Systems and Institutions	
Categories of People	Differentiating Variables	Intervening Variables	Types	Differentiating Variables
			Industry	Employees
Family Units	Goals	Educational Programs		Wage groups
Husband	Knowledge		Business	Wages
Wife	Attitudes		Education	Mobility
Children	Practices			Suggestions to company
Other	Other		Church	
	(See list in text.)			Seniority
				Absenteeism
				Other Income
				Extent of farming

Figure 7. Tentative model for studying relationships between home environment and employment.

Each employed family member affects and is affected by the family, and the family modifies its members not only in the home but on the job.

In Figure 7, the column of differentiating variables under human resources represents the fact that families and members of families differ on a number of characteristics, which are subject to change associated with many factors within and outside of the home. Some of the differentiating variables for family units include economic, social, vocational, educational, housing, and health goals and aspirations; knowledge related to homemaking or other aspects of life; health as reflected in diet or sleep, quality of housing; attitudes toward jobs or toward themselves as people; social participation; management of resources; geographic mobility; interaction within the family including communication, authority patterns and cohesiveness; clothing behaviors; composition of the family, including ages and number; psychological characteristics of family members; educational level of members; and abilities related to employment.

The model lists a few examples of social systems and institutions. The differentiating variables included refer to characteristics on which individual employees as well as groups of employees associated with various industries or businesses would differ.

It is proposed that identification of relationships between the differentiating variables of family units and those of employees would be useful to vocational education. Such knowledge is needed by education in attempting to provide intervening variables that would facilitate behavioral changes beneficial to the family units and to business and industry.

A null hypothesis proposed for further testing is that no correlation exists between wife's educational level and measures of achievement of the husband in the work world. If findings justify rejection of this hypothesis, such a relationship could be explained in part by the relationship between general education and ability to learn to make improvements in home environment. A further null hypothesis is that if education focused on improved home and family living is linked with higher levels of the wife's general education, measures of home environment will not only show improvement, but the relationship between the education of the wife and measures of achievement of the husband in the work world will be stronger. These two hypotheses can be tested in the survey being proposed as an immediate follow-up of this exploratory study.

The following null hypotheses are also proposed for testing. There is no relationship between a cluster of employment variables including wage group, mobility, wages and seniority and the following differentiating variables for family units: psychological characteristics of the wife, aspirations of the family relating to housing and clothing, type of clothing worn by the employee, knowledge of aspects of homemaking, attitude of the wife toward the job of the husband, quality of housing, quality of clothing, social participation index of the family, management of resources and dietary intakes of the husband and wife. There is no relationship between suggestions to the company and educational level of the husband and wife, management of resources and psychological characteristics of the wife. There is no relationship between absenteeism and number of children, quality of housing, geographic mobility and roles assumed by family members.

VI. SUMMARY

A. Problem

There is evidence supporting the need for investigating the relationships between home environment and employment criteria for the husband. Few studies have explored this concept to date.

B. Objectives

The objectives of the present study were:

1. To identify some characteristics and possibly patterns of characteristics of the home environment of skilled, semi skilled, and unskilled workers which appear to be related to the employment record of the husband.
2. To test various methods of obtaining information.
3. To develop a rationale consistent with the findings and including hypotheses to be tested later in a more comprehensive study of relationships between employment and home environment.

C. Method

The population chosen was skilled, semi-skilled and unskilled workers who met the criteria for the study being conducted. Criteria for selection were: 1) married man with wife living at home and employed outside the home less than 20 hours per week, 2) family of one or more children under the age of 18 living at home, 3) man initially employed by the company between 1951 and 1955 and continously employed since that time, and 4) man had attained a minimum of an eighth grade education.

A sample of 40 employees of a midwestern manufacturing firm in a non-metropolitan area was selected. The employees were divided into two groups based on the wage group at the time of the study. Judgment sampling was used in an attempt to keep the educational level of the two groups equal and the group employment variables as different as possible.

Employment variables selected included wage group at the time of the study; number of successful bids upward and mobility across wage groups; income received from the company, from other sources and total income; number of absences, hours absent and absence due to illness; accidents; and number of suggestions to the company.

Home environment categories of variables included: clothing behaviors, housing, social characteristics, child development and family relationships, food and nutrition, management of resources and health.

The data were collected from three sources: the company, the homemaker and a questionnaire filled out by the husband. Two home economists with training in interviewing techniques collected the data.

A letter from the company and union officials notified selected employees prior to the beginning of the interviews. The interviewers went in pairs to the selected homes during the period beginning May 4 and ending June 14, 1966.

Three methods of analyzing the data were used: development and analysis of case studies, a comparison of the two criterion groups based on the means of variables for the two groups and an examination of intercorrelations among 116 variables within each of the criterion groups and for the total of 40 families.

D. Results

The employment variables included criterion group, seniority, mobility, absenteeism, suggestions to the company, wages and other employment. The means for Group 2 were higher on upward mobility, annual wages and number of suggestions submitted to the company. Number of absences and part-time jobs were similar for Groups 1 and 2, and seniority for the men in Group 2 was somewhat higher.

Home-environment variables included social participation of the family, housing, psychological characteristics of the wife, food, nutrition and health, clothing, management of resources, and family relationships and authority patterns. The measures of social participation, housing, psychological characteristics of the wife and management of resources appeared positively related to each other. Criterion Group 2 had higher means than Group 1 on three-fourths of the home-environment variables.

The employment variables of criterion group or wage group at the time of the study, mobility, wages, and seniority were positively related to psychological characteristics of the wife, number of suggestions for house improvement, type of clothing worn by the man to work, preference of the wife for a 14 dollar dress over two seven dollar dresses, and knowledge of food and nutrition on the part of the wife. One or more of the above employment variables was positively related to knowledge of textiles and clothing by the wife, attitude of the wife toward the job of the husband, extent to which the husband selected his own clothing, management of resources, housing, quality of the wardrobe of the wife and social participation index of the family.

Suggestions to the company correlated positively with management of resources, psychological characteristics of the wife and number of suggestions for house improvement. Number of children in the family and geographic mobility of the family correlated negatively with absenteeism. Absences due to illness correlated negatively with the housing cluster and management of resources and positively with extent patriarchal in authority pattern.

The method of defining a population and sampling employees of a cooperating company was efficient. Conducting interviews using a pair of interviewers proved to be advantageous.

E. Recommendations

It is recommended that the relationships identified in this study be investigated further in a survey of employees in industrial, distributive and service kinds of jobs for which vocational and technical education provide training. A number of the measures of the variables need to be refined in order to provide for increased reliability.

It is recommended that the methods used in defining a population and in conducting the interviews be used in a follow-up survey. Consideration should be given to interviewing the husband as well as the wife.

A tentative model for study of relationships between home environment and employment is proposed. Hypotheses for further testing are suggested.

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VIII. APPENDIX

A. Coding Plan

Variable No.   Explanation of Variables Reported

1. The group number was defined as follows: The upper criterion group was Group 2, consisting of men in wage groups 7,8,9, 10, and 11 at the time of the study, and the lower criterion group was Group 1, consisting of men in wage groups 1, 2, and 3 at the time of the study. There were 11 wage groups and they were coded so that 1 represented the lowest and 11 the highest wage group.

2. Beginning wage group was the wage group in which the man began work for the company

3. Wage group at the time of the study is explained under variable one.

4. Mobility distance was the distance across wage groups that a man had moved. It was the number of wage groups between where he started and where he was at the time of the study. The possible range was 0-10.

5. Number of successful bids upward was the number of bids for advancement the man made and was awarded. A man had the opportunity to bid for a new job in which there was a vacancy. A successful bid meant he obtained the job; however, involuntary downgrading might later have moved him back to his previous job or lower. Also, a man could ask to be downgraded to a less difficult job. Thus, a man might have made several successful bids upward and still not necessarily be in a higher wage group than when he began.

6. Company income was divided into six categories and coded in the following manner:

   1 - under $3,999
   2 - $4,000 - $5,499
   3 - $5,500 - $6,999
   4 - $7,000 - $8,499
   5 - $8,500 - $9,999
   6 - over $10,000

7. Other income was divided into six categories and coded in the following manner:

   1 - none or less than $100

Variable No.

2 - \$100 - \$999
3 - \$1,000 - \$1,999
4 - \$2,000 - \$2,999
5 - \$3,000 - \$3,999
6 - over \$4,000

8. Number of absences was coded as actual number of absences during 1965.

9. Total hours absent was coded as actual hours absent during 1965.

10. Absence due to illness was coded as actual hours absent because of illness in 1965.

11. Number of suggestions was coded as actual number of suggestions made to the company since date of hire. This included both those for which the employee received remuneration and those for which he did not.

12. Actual age of the husband was coded in years.

13. Actual age of the wife was coded in years.

14. Actual number of pre-school children was coded.

15. Actual number of elementary school children was coded.

16. Actual number of high school children was coded.

18. Actual number of children at home was coded.

20. Actual total number of children was coded.

21. Actual age of husband when the first child was born was coded in years.

22. Actual age of wife when the first child was born was coded in years.

23. Educational level of husband was recorded as years of school completed and ranged from 8 to 12.

24. Educational level of wife was recorded as years of school completed and ranged from 8 to 15.

25. Actual number of part-time jobs held by the husband was coded with the range from 0-3.

Variable No.

26. Extent of farming was coded as follows: 0=none, 1=15 acres or livestock, 2=109 or 150 acres, 3=240 or 360 acres.

27. A definition of house type developed by Warner (21, p. 149-150) was revised and coded as follows:

Score	Type
7	Excellent house: large, single family dwelling. good repair, landscaped, element of ostentation, interiors expensively finished.
6	Very good house: not quite as large as the previous. Still larger than utility demands. Less pretentious.
5	Good house: only slightly larger than utility demands. More conventional than the previous two.
4	Average house: well kept, conventional, mowed lawns, interiors appropriately furnished, aesthetics pleasing, essential furnishings present and in good condition.
3	Fair house: smaller, rectangular frame house, small lawn. Furnishings not expensive, but not deteriorated. May slightly need paint.
2	Poor house: category determined more by condition than size. Badly run-down but could be repaired. Interiors and exteriors need repair and are aesthetically unattractive. Not usually neat and clean.
1	Very poor house: has deteriorated so far that it cannot be repaired. Considered unhealthy and unsafe. May be a building not originally intended for dwelling. Halls and yards littered with junk. May have extremely bad odor. Frequently little furniture and in poor repair. Cleanliness and neatness at low level.

28. Evaluation of neighborhood was based on a scale developed by Warner (21, p. 123) for urban locations with direction of scoring reversed.

Score	Type
7	Very high: estate, very prestigious localities

Variable No.

6 High: the better suburbs and apartment house areas. Houses with spacious yards.

5 Above average: areas all residential, larger than average space around houses. Houses in good condition.

4 Average: residential areas. No deterioration in area.

3 Below average: not quite holding its own, business entering.

2 Low: considerable deterioration, run-down.

1 Very low: slum

Farm homes: surrounding buildings and farm were rated comparable to the above system.

29. Housing density was the number of persons per room. The scores ranged from 0.7 - 3.6.

30. Number of moves was actual number of house moves in the last five years.

31. Number of organizations of the entire family was the sum of organizations in which the husband, wife and children participated.

32. Social participation index of the wife was scored by weighting extent of participation in the following manner:

Number of organizations always attended ___X3 =____ .

Number of organizations sometimes attended___X2 =____.

Number of organizations never attended___ X1 =____.

Total offices held___X3 =____.

Social participation index Total____.

33. The social participation index of the family was calculated in the same manner as the preceding variable for each family member over six years of age and an average of the indexes was used.

Variable No.

34. House cleanliness was coded 0=poor, 1=medium, 2=good. This was a judgment made by the interviewers.

35. House orderliness was coded and judged as 34.

37. Aesthetic quality of the house was coded and judged as 34.

38. Whether furnishings were in repair was coded and judged as 34.

39. Presence of essential furnishings was coded and judged as 34.

40. To determine status of stores patronized all of the stores that the family patronized were listed, then categorized and coded as follows: 0=none, 1=low priced, 2=medium priced, 3=high priced. The mean score of stores patronized was used.

46. Number of newspapers to which the family subscribed was recorded as actual number.

47. Number of magazines to which the family subscribed was recorded as the actual number.

48. To measure marital happiness homemakers were asked to check on a seven point scale similar to that developed by Terman the degree of happiness of their present marriage. The scale is reported in Locke (15, p. 65).

1	2	3	4	5	6	7
.	.	.	.	.	.	.
very unhappy			happy			perfectly happy

50. The item "Does house meet your needs better now than when you moved in?" was coded 0=no, 1=yes.

51. The item "Do you have any difficulty in getting the improvements you need made?" was coded 0=no, 1=yes.

54. Self-actualization was rated by the interviewers on a scale from 1 (low) through 5 (high). The self-actualizing person was defined as more fully functioning and living a more enriched life than the average person, as active, motivated, confident, independent, social, content, and tolerant.

Non-self-actualizing persons were defined as rigid, frustrated, anxious, insecure, self-pitying and immature.

55. Self-esteem was rated by the interviewers on a scale from 1 (low) through 5 (high). Self-esteem was defined as the degree of adequacy or self-worth felt by an individual.

56. Ability to verbalize was rated by interviewers as 0=poor, 1=average, 2=good.

57. Ability to understand questions was scroed the same as 56.

59. Willingness to express ideas was rated by interviewers as 0=unresponsive, 1=average, 2=expressive.

60. The item "Would you like for your son to have the same job that your husband has now when he grows up?" was coded 0=no, 1=yes under certain conditions, 2=yes.

61. Number of organizations with a church focus was coded 0=none up to the actual number of activities listed by the wife for the family.

62. Number of organizations with a community focus was coded 0-none up to the actual number of activities listed by the wife for the family.

63. Number of organizations with an entertainment focus was coded 0=none up to the actual number of activities listed by the wife for the family.

64. Number of organizations with a focus on youth and socialization was coded 0=none up to the actual number of activities listed by the wife for the children.

65. The leisure time the husband spent working on the house was coded 0=none, 1=some.

66. Whether the husband spent leisure time in recreation was coded 0=none, 1=some.

67. The item "What specific things would you insist on having in a different house?" was coded 0=nothing up to the actual number of suggestions.

68. Number of years employed by the company was figured to the nearest whole number from date of employment to May 1, 1966 and the actual number was recorded.

Variable No.

69. Extent of written planning for food purchasing was determined by summing (a) whether a written list was made with 0=never, 1=sometimes, or 2=always, and (b) what the list included with 0=few items, 1=almost everything, or 2=everything. Scores were from 0-4.

70. Conscious use of advertising for food was a sum of the reponses on four items scored with a possible 0=almost never, 1=sometimes, and 2=almost always. The four items referred to whether the wife checked newspaper advertisements, whether she used the information, whether she listened to advertisements on radio or TV, and whether this affected her choice of foods. Range was from 0-8.

72. Use of information on food labels was a sum of responses to two items regarding whether the wife read labels for weight before buying and whether the information affected her choice. Range was from 0-4. Scoring for items was same as preceding variable.

77. Whether the family had a weekly budget for food was scored 0=no, 1=yes.

78. The wife's ability to make food substitutions concerning meat, milk and orange juice was scored 0=none correct to 3=all three items correct.

79. The wife's knowledge of nutrients contained in five foods was obtained by asking her to select from a list, the nutrient or nutrients that were found in important amounts in these foods. A perfect score was 10.

80. Whether the wife was overweight was coded 0=no, 1=yes.

81. Overweight on the part of the husband was coded the same as 80.

82. To obtain a food fallacies score homemakers were asked to agree or disagree with statements of common misconceptions about food and then to state their degree of certainty about each response. Responses were scored from -8 to +8 for each of 11 items and converted for purposes of coding to two-digit, positive scores using the formula,

$$\frac{\text{Degree of certainty score } +88}{10}.$$

83. The record of dietary intake for the husband was a record of food and beverages consumed over a three-day period.

Variable No.

The record was analyzed by nutrition specialists and coded 0=poor, 1=fair, 2=good and 3=excellent.

84. The record of dietary intake of the wife was based on recall of food and beverages for the previous twenty-four hours by the wife. This record was analyzed by nutrition specialists and coded 0=poor, 1=fair, 2=good and 3=excellent.

85. To code health problems of the family actual number of problems listed was recorded.

86. Whether or not one or more family members was lacking in energy was coded 0=no, 1=yes.

87. Whether religious personnel would be consulted when the family had probems was coded 0=no, 1=yes.

88. Whether a relative or friend would be consulted when the family had problems was coded 0=no, 1=yes.

89. Whether a professional person such as a physician, school principal, lawyer, banker, staff of mental health center would be consulted when the family had problems was coded 0=no, 1=yes.

90. Wife indicated that family would consult no one when family had problem. This was coded 0=no, 1=yes.

96. Whether the husband was clothes-conscious in regard to what the wife wore was coded 0-no, 1=some, 2=yes.

97. Whether the husband was clothes-conscious about his own clothes was coded 0-no, 1=some, 2=yes.

98. What the husband wore to work was coded 0=jeans, 1=slacks.

100. Extent to which the husband selected his clothes was coded 0=gifts, 1=wife alone, 2=husband and wife together, 3=husband alone.

101. The item "if you could make any changes in the kind of clothes you have, what would they be?" was coded 0=none, 1=inability to verbalize, and 2=some.

102. The item "If you had $14 to spend on a dress, would you rather buy one $14 or two $7 ones?" was coded 0=$7.00, 1=uncertain, 2=$14.

Variable No.

104. The item "Who decides how the money should be used in the family?" was coded 0=wife, 1=both, 2=husband.

105. Responses to the item "If you manage to save money, how do you do it?" were summarized and coded as to regularity of savings with 0=none, 1= occasionally, 2= regularly.

107. On the item "Which of the following jobs would your husband help you accomplish?" Six household tasks were listed such as help clear table. The number of jobs with which husband helped was recorded. Scores ranged from 0-6.

108. The homemaker was asked if she thought women should work outside the home. Responses were coded 0=no, 1=yes under certain conditions, 2=yes.

110-
119. Judgements made by the interviewer (Reliability was established.) were made on the basis of a review of all data concerning the following:

110 - Degree of the wife's use of consumer information concerning clothing was scored on a five-point scale with 1=none to 5=much.

111 - Wife's knowledge of textiles was scored on five point scale with 1=none to 5=much.

112 - Sense of clothing adequacy -- deprivation reported by the wife was coded on a five-point scale with 1=dissatisfied to 5=highly satisfied.

113 - Actual quality of the wife's wardrobe was coded on a five-point scale with 1=low to 5=high.

114 - Social mobility was judged on a five-point scale with 1=downwardly mobile, 3=static, and 5=upwardly mobile.

115 - Extent of conflict - harmony in the family was judged on a five-point scale with 1=intense conflict to 5=consistent harmony.

116 - Degree of family communication was coded on a five-point scale with 1=uncommunicative to 5=highly communicative.

117 - Extent patriarchal in authority pattern in the family was coded on a five-point scale with 1=matriarchal, 3=shared authority and 5=patriarchal.

Variable No.

118 - Use of structured planning in the family for use of money was coded on a five-point scale with 1=none to 5=much.

119 - Wife's knowledge of family finances was coded on a five-point scale with 1=none to 5=much.

OE 6000 (9-66)

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15. ABSTRACT (250 words max.)

This study investigated relationships between home environment and employment criteria for male workers.

The objectives were to identify patterns of characteristics of the home environment of skilled, semiskilled, and unskilled workers as they relate to employment records of the male, and to develop a rationale for a comprehensive study of relationships between employment and home environment.

The work population chosen was a sample of 40 employees of a midwestern manufacturing firm in a non-metropolitan area.

Employment variables selected included: wage group; mobility across wage groups; income received from the company, income from other sources, and total income; number of absences, hours absent, and absence due to illness and accidents.

Home environment variables included: clothing behaviors, housing, social characteristics, child development and family relationships, food and nutrition, management of resources and health.

The data were collected from three sources: the company, the homemaker and the husband.

The employment variables were positively related to psychological characteristics of the wife, such as home management abilities, including suggestions for house improvement, and clothing patterns such as type of clothing worn by the man to work, and clothing preferences of the wife.

Most of the above variables gave significant results in the study.

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